

Section A
Urban Water Conservation 2003 Grant Application

1. Applicant (Organization or affiliation): County of Sutter
2. Project Title: Robbins Water Meter Retrofit Project
3. Person authorized to sign and submit proposal:
Name, Title – Robert Barrett, Public Works Director
Mailing Address – 1130 Civic Center Blvd., Yuba City, CA 95993
Telephone – 530-822-7450
Fax – 530-822-7457
E-Mail – Rbarrett@co.sutter.ca.us
4. Contact person (if different):
Name, Title – James E. Walton, Public Works Engineer
Mailing Address – 1130 Civic Center Blvd., Yuba City, CA 95993
Telephone – 530-822-7450
Fax – 530-822-7457
E-Mail – Jwalton@co.sutter.ca.us
5. Funds requested (dollar amount): \$132,250
6. Applicant funds pledged (local cost share) (dollar amount): N/A
7. Total project costs (dollar amount): \$132,250
8. Estimated annual amount of water to be saved (acre-feet): 35
25% savings verses pre metered demand
Estimated total amount of water to be saved over 20 years
(acre-feet): 700

Benefit/cost ratio of project for applicant: 5.25
Project Life (month/year to month/year): 7/1/03 to 6/30/04
10. State Assembly District where the project is to be conducted: 2
11. State Senate District where the project is to be conducted: 4
12. Congressional District(s) where the project is to be conducted: 3
13. County where the project is to be conducted: Sutter
14. Do the actions in this application involve physical changes in land use, or potential changes in land use? No

SECTION A
APPLICATION SIGNATURE PAGE

By signing below, the official declares the following:

The truthfulness of all representations in the application;

The individual signing the form is authorized to submit the application on behalf of the applicant;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the application on behalf of the applicant; and

The applicant will comply with all terms and conditions identified in this Application Package if selected for funding.

Signature

Name & title

Date

SECTION B ROBBINS WATER METER INSTALLATION SCOPE OF WORK

B1. DESCRIPTION OF PROJECT

The project consist of metering single family residential connections and applying metered rates in the Robbins WWD#1 service area. These connections are currently non-metered and are billed on a flat rate billing. The intent of this project is to reduce water use by installing residential meters and then converting newly metered customers from a flat rate billing structure to a metered rate structure.

The Robbins WWD#1 project is located 21 miles south of Yuba City and has an approximate population of 280 people. Robbins WWD#1 service area has 102 connections of which 94 are single family connections. Currently 87 service connections are non-metered, and the 15 metered connections are billed a flat rate.

The objective of this project is to retrofit 87 non-metered service connections with $\frac{3}{4}$ inch water meters in the year 2003. The project cost is estimated at \$132,250. By providing meters, it has been demonstrated by the American Water Work Association (AWWA) that demands for water will be reduced by 20-25%.

B2. WATER ISSUES, NEED, and CONSISTENCY with OTHER PLANS

The efficient use of California's limited water supplies is a critical local, regional, and state-wide water issue. The purpose of this project is to significantly increase water use efficiency by installing water meters. Metering of customers will be particularly effective in the central valley area because of the hot summers that characterize the climate of the area.

B3. PROJECT SCOPE AND OBJECTIVES

Tasks:

1. Develop action plan.
2. Purchase and install water meters through the competitive bid process.
3. Implement and monitor conservation measures for newly metered customers.
4. Prepare the project report.

Standard purchasing and contracting procedures will be used to purchase meters and install meters by a general contractor.

B4. MONITORING AND ASSESSMENT

The County will monitor and assess the before and after water use of newly metered customers. The County is currently monitoring the water use in Robbins by measuring the amount of water flowing through the Robbins Water Treatment Plant.

B5. METHODS, PROCEDURES, and FACILITIES

The County of Sutter will use standard engineering, construction, and rate structure methods to implement this project. Standard purchasing and contracting procedures will be used to purchase meters and install meters by a general contractor.

B6. CONSTRUCTION SCHEDULE

TASKS	COSTS	F.Y. 2003*	F.Y. 2004*
1. Develop action Plan	\$1000	August 2003	
2. Finalize Contract Documents	\$2500	October 2003	
3. Competitive Bid	\$1500	December 2003	
4. Purchase and Install Meters	\$64,000		April 2004
5. Prepare Project Report	\$1000		June 2004

*All items to be completed by the end of the month of each fiscal year.

SECTION C COMMUNITY OUTREACH AND INVOLVEMENT

This section describes the outreach efforts that will be made by the County of Sutter during the project and the plan for disseminating the project information during different phases of the project.

C1. OUTREACH EFFORTS

The Town of Robbins is currently an unmetered unincorporated residential development with a community water well. There are 102 water connections of which 94 are single family connections; 87 of these connections are not metered. Because the project's scope of work is specifically to meter the single-family units in the service area, outreach efforts will focus primarily on the single-family residences. The Robbins Water System provides water to approximately 280 people in the community.

C2. TRAINING, EMPLOYMENT, and CAPACITY BUILDING POTENTIAL

A contractor will be selected through competitive bidding to perform the actual installations of the meters. It is anticipated that the installation will require crews of four to five workers. Once the meters are installed, there will not be a need for any new employment.

C3. PROJECT INFORMATION PLAN

Sutter County staff realizes the critical role that public perception and acceptance of metering will play in a project like ours. Therefore, it will become critical to gauge the perceptions and attitudes of the community before beginning a public relations effort. With this in mind, the information plan will include the following:

Educational Materials – An information pamphlet describing the metering program will be mailed out to each home.

Sutter County Website – The Sutter County website will keep the community updated on the project. Residents will have the ability to send e-mail to the project manager as a way to keep communications open between residents and county staff.

Community Meetings – County staff will hold scheduled meetings and make presentations to community members about the metering program and other important issues, related to water conservation.

C4. LETTERS OF NOTIFICATION

There are no local land use entities, water districts, or other potentially impacted or cooperating agencies to be notified of this proposal.

SECTION D

QUALIFICATIONS OF THE APPLICANTS, COOPERATORS, AND ESTABLISHMENT OF PARTNERSHIPS

The qualifications of the project manager, cooperators, and partners to be involved in the metering program for the Robbins water service area are discussed below. A description of the customer service area is also included.

D1. ROBBINS WATER SERVICE AREA AND PROJECT MANAGER

The rural community of Robbins is an agricultural service community with 280 residents, 94 single family residences, a multiple-family housing development with 9 units, a small mobile home park, a post office, an elementary school, a fire station, 13 other farm supply and equipment facilities, and facilities for processing rice and grain products.

The community is on reclaimed marsh land between the Sacramento and Feather Rivers, about 20 miles southwest of Yuba City. Low elevations, low soil permeability, and seepage from rice fields and farm water ditches contribute to very high ground water

The project manager responsible for the metering program for the Robbins water service area will be Michael Lee, P.E., Senior Engineer for Sutter County. Mr. Lee's resume is included in Appendix A.

D2. EXTERNAL COOPERATORS

No external cooperators will be utilized for the Robbins service area metering program.

D3. PARTNERSHIPS DEVELOPED TO IMPLEMENT PROJECT

No external partnerships will be developed for the Robbins service area metering program.

SECTION E COSTS AND BENEFITS

This section describes both the quantifiable and non-quantifiable costs and benefits associated with the proposed project. Included is a budget and cost breakdown of the project.

E1. BUDGET SUMMARY AND BREAKDOWN

Table A below represents the estimated project costs associated with the proposed metering project:

Table A

Cost item	Costs, \$
Planning/Design/Engineering	15,000
Parts and materials	30,000
Inspection/Admin/Overhead	10,000
Labor	60,000
Contingency (15%)	17,250
Total Costs	\$132,250

The total cost of the project is \$132,250. Sutter County is requesting \$132,250 from CALFED funding grants.

E2. BUDGET JUSTIFICATION

The budget estimate was based on discussions with local contractors in the area on their costs for equipment setup and installation.

E3. BENEFIT SUMMARY AND BREAKDOWN

Table B below represents the estimated project benefits associated with the proposed metering project:

Benefit Type	Quantity	Value	Total Value
Water Savings	700 ac-feet	\$1300/ac-ft	\$910,000

*meter reading over a 20 year period: 102 meters X \$20 = \$40,800

Benefit/Cost Ratio (>1.0)

Total Project Benefits = \$910,000

Total Project Costs = \$132,250 + 40,800 = 173,050

Benefit/Cost Ratio (2002 dollars) = 5.25

E4. ASSESSMENT OF COSTS AND BENEFITS

This section includes an assessment that summarizes the costs and benefits of the proposed project. The major analysis assumptions are listed below.

- The amount of meters to be installed is 87.
- This project will reduce water usage by 20 to 25% as demonstrated by the AWWA.
- Water meters will cost an average of \$1000 each, including meters and overhead. This cost is based on discussions with contractors and other municipalities.
- The value of conserved water in the Robbins water service area is \$1300/ac-ft.
- Single-family water usage is 800 gpd.
- It will cost an average of \$20 /year to read and maintain one meter.
- The lifetime of a meter is 20 years.

Appendix A
Resume – Project Manager

Appendix B

Site Map